REMARKS

Claims 1-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Forslow (U.S. Patent Number 6,608,832) in view of McDermott (EP 1175034). The applicant respectfully disagrees with these rejections and requests reconsideration.

The Examiner asserts (on page 2) that "it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the error rate of a transmission as taught by McDermott in Forslow's system with the motivation being to provide a system that transmits image data or any other type of data in packets **by RF carrier** where the packet size is adjusted responsive to bit error rate" (emphasis added). To support this motivation, the Examiner cites McDermott page 7, lines 7-10, which reads (emphasis added):

> A second embodiment of the invention is a system that transmits image data or any other type of data in packets **by RF carrier** where the packet size is adjusted responsive to bit error rate.

However, the aspects of Forslow's system that the Examiner depends on for the present rejections do not involve communications by RF carrier. In other words, combining Forslow with McDermott would result in a communication system that operates similar to McDermott for transferring data on the RF links and according to Forslow for the other aspects of data transfer. This is what a person of skill in the art would be motivated to do according to the motivation cited in McDermott.

McDermott is clearly focused on RF data transmission describing embodiments that operate according to ANSI/IEEE Std. 802.11. In contrast, Forslow is focused on network signaling. Forslow is entitled, "COMMON ACCESS **BETWEEN** A MOBILE COMMUNICATIONS **NETWORK AND** AN EXTERNAL **NETWORK** WITH SELECTABLE PACKET-SWITCHED AND CIRCUIT-SWITCHED AND CIRCUIT-SWITCHED SERVICES" (emphasis added). Forslow's abstract reads as follows (emphasis added):

> Applications running on a mobile station or an external network entity such as an Internet

> service provider may specify on an individual application flow basis a requested quality of service. From that requested quality of service, **an optimal type of bearer to transfer the application flow through the mobile communications network is determined**. For example, a **circuit-switched bearer** may be allocated if the request is for a real-time service, and a **packet-switched bearer** may be allocated if the request is for a non-real time type of service. Various other decision making criteria may be employed. A mobile station and a mobile network gateway node each include a mapper for mapping an individual application flow to one of a circuit-switched network and a packet- switched network bearer depending on the quality of service requested for the individual application flow. The network layer quality of service parameters corresponding to an individual application flow are mapped to circuit-switched bearer parameters if the application flow is mapped to the circuit-switched network and to packet-switched bearer parameters if the application flow is mapped to the packet-switched network. The gateway node includes a common access server which permits a mobile station initially establishing a communications session with an external network entity to perform only a single, common access procedure for subsequent communications using one of the circuit-switched and packet- switched networks. After that common access procedure is completed, subsequent application flows between the mobile station and the external network entity are established using abbreviated procedures without having to access the external network entity.

Thus, Forslow is primarily concerned with the allocation of circuit-switched verses packet-switched bearer in the network to support mobile station applications.

Moreover, the Examiner specifically relies on the portions of Forslow quoted below for the rejections of independent claims 1, 7 and 12 (surrounding text is also include to provide some context for the specific citations). Forslow column 2, lines 14-29 reads (emphasis added):

> FIG. 1 shows a mobile data service from a user's point of view in the context of a mobile communications system **10** . An end user communicates data packets using a mobile host **12** including for example a laptop computer **14** connected to a mobile terminal **16** . The mobile host **12** communicates for example with a fixed computer terminal **18** incorporated in a local area network (LAN) **20** through a mobile packet data support node **22** via one or more routers **24** , a packet data network **26** , and a router **28** in the local area network **20** . Of course, those skilled in the art will appreciate that this drawing is simplified in that the "path" is a logical path rather than an actual physical path or connection. In a connectionless data packet communication between the mobile host **12** and fixed terminal **18** , packets are routed from the source to the destination independently and do not necessarily follow the same path (although they can).

Forslow column 4, lines 9-41 reads (emphasis added):

Packet-switched data communications are based on specific protocol procedures which are typically separated into different layers. FIG. 3A shows a GPRS "transmission plane" that is modeled with multi-layer protocol stacks. Between the GGSN and the SGSN, the GPRS tunneling protocol (GTP) tunnels the PDUs through the GPRS backbone network **52** by adding routing information to encapsulate PDUs. The GTP header contains a tunnel end point identifier (TID) for point-to-point and multicast packets as well as a group identity (GID) for point-to- multipoint packets. Additionally, a type field that specifies the PDU type and a quality of service profile associated with a PDP context session is included. Below the GTP, the well-known Transmission Control Protocol/User Diagram Protocol (TCP/UDP) and Internet Protocol (IP) are used as the GPRS backbone network layer protocols. Ethernet, frame relay (FR), or asynchronous transfer mode (ATM)-based protocols may be used for the link and physical layers depending on the operator's network architecture.

Between the SGSN and mobile station/host, a SubNetwork Dependent Convergence Protocol (SNDCP) maps network level protocol characteristics onto the underlying logical link control (LLC) and provides functionalities like **multiplexing of network layer messages onto a single virtual logical connection**, ciphering, segmentation, and compression. A Base Station System GPRS Protocol (BSSGP) is a flow control protocol, which allows the base station system to start and stop PDUs sent by the SGSN. This ensures that the BSS is not flooded by packets in case the radio link capacity is reduced, e.g., because of fading and other adverse conditions. Routing and quality of service information are also conveyed. Frame relay and ATM may be used to relay frames of PDUs over the physical layer.

Forslow column 12, lines 11-34 reads (emphasis added):

Rather than using a multiplexer, e.g., H.223, which multiplexes all of the four application flow types for transport by one type of bearer, e.g., a circuit-switched bearer like a V.110 modem, the present invention provides a bearer selection and quality of service parameter mapping layer which selects for each application flow at the IP layer the best suited one of a circuit-switched bearer and a packet-switched bearer. In this example depiction in FIG. 7 , a circuit-switched bearer is shown as a V.110 modem employing an IP/PPP protocol, and a packet-switched bearer is shown as a GPRS modem employing IP over SNDCP protocol. A circuit- switched modem connection is established by dialing a telephone number to establish a dedicated connection where individual IP packets are not routed. Point-to-point protocol (PPP) is an encapsulation protocol used to carry IP packets over any serial line, dial up connections and therefore is well suited for circuit-switched bearers. Conversely, the GPRS modem routes each IP packet based on its header information. The subnetwork dependence convergence protocol (SNDCP) provides segmentation and compression of headers and data between the mobile station and the SGSN in the GPRS. The SNDCP is specifically developed to carry IP packets directly thereby avoiding PPP.

The applicants submit that the portions of Forslow cited by the Examiner fail to provide a motivation to apply the techniques of McDermott to the bearer links of Forslow, particularly those cited against the present independent claims 1, 7 and 12.

The motivation provided by the Examiner refers only to RF carrier applications and is quite generic in nature. It fails to provide a motivation with any specificity, in particular, with respect to data transfer on network bearer links. Therefore, the applicants assert that the Examiner has failed to provide a sufficient teaching or motivation from the prior art for combining Forslow and McDermott in the rejection of the present claims. Thus, a prima facie case for obviousness has not been made, and the rejections should be withdrawn.

Furthermore, the Examiner cites Forslow as teaching the multiplexing higher-layer packets onto a lower-layer packet. Independent clam 1 recites (emphasis added) "multiplexing higher-layer packets onto a lower-layer packet, the lower-layer packet having a size as determined in step (C)." Claim 2 recites (emphasis added) "wherein the step of receiving the plurality of higher-layer packets comprises the step of receiving the plurality of higher-layer packets **from a plurality of users**." Independent claim 7 recites (emphasis added) "multiplexing the plurality of UDP/IP packets onto a PPP packet having a size equal to the PPP packet size." And independent claim 12 recites (emphasis added) "multiplexing the plurality of higher-layer packets onto a lower-layer packet, wherein the lower-layer packet has a size equal to the lower-layer packet size."

However, Forslow, as cited by the Examiner, fails to teach multiplexing higher-layer packets onto **a single lower-layer packet**, as claimed. As highlighted above in the portions of Forslow, Forslow instead teaches, "Rather than using a multiplexer, e.g., H.223, which multiplexes all of the **four application flow types...**" and "multiplexing of network layer messages onto a single **virtual logical connection.**" Also, the applicants assert that Forslow does not teach multiplexing higher-layer packets **from a plurality of users** onto a lower-layer packet, as claimed.

Thus, since neither Forslow nor McDermott, either independently or in combination, teach all of the limitations of base claims 1, 7 and 12, or therefore, all the limitations of their dependent claims, the applicants assert that the Examiner has not shown anticipation nor made a prima facie case for obviousness. No remaining grounds

for rejection or objection being given, the applicant now respectfully submits that the claims in their present form are patentable over the prior art of record, and are in condition for allowance. As a result, allowance and issuance of this case is earnestly solicited.

The Examiner is invited to contact the undersigned, if such communication would advance the prosecution of the present application. Lastly, please charge any additional fees (including extension of time fees) or credit overpayment to Deposit Account No. **502117 -- Motorola, Inc.**

Respectfully submitted,
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By: _____

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